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=> s (NK1 (5A) (receptor(3A)antagonist))
L5 2399 (NK1 (5A) (RECEPTOR(3A) ANTAGONIST))

=> s L5 (P) (COPD or (chronic (W)obstructive (W) pulmonary(W) (disease or disorder)))

L6 5 L5 (P) (COPD OR (CHRONIC (W) OBSTRUCTIVE (W) PULMONARY(W) (DISEA SE OR DISORDER)))

=> dup rem L6
PROCESSING COMPLETED FOR L6

L7 4 DUP REM L6 (1 DUPLICATE REMOVED)

=> s L7 NOT Pd>20020708 L8 1 L7 NOT PD>20020708

=> d L8 TI AB IBIB

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

TI SCH 206272: a potent, orally active tachykinin NK1, NK2, and NK3 receptor antagonist

AB Expts. were performed to characterize the pharmacol. of SCH 206272 [(R,R)-1'[5-[(3,5-dichlorobenzovl)methylamino]-3-(3,4-dichlorophenyl)-4(Z)-(methoxyimino)pentyl]-N-methyl-2-oxo-[1,4'bipiperidine]-3-acetamide] as a potent and selective antagonist of tachykinin (NK) NK1, NK2, and NK3 receptors. SCH 206272 inhibited binding at human tachykinin NK1, NK2, and NK3 receptors (Ki=1.3, 0.4, and 0.3 nM, resp.) and antagonized [Ca2+]i mobilization in Chinese hamster ovary (CHO) cells expressing the cloned human tachykinin NK1, NK2, or NK3 receptors. SCH 206272 inhibited relaxation of the human pulmonary artery (pKb=7.7.+-.0.3) induced by the tachykinin NK1 receptor agonist, [Met-O-Me] substance P and contraction of the human bronchus (pKb=8.2.+-.0.3) induced by the tachykinin NK2 receptor agonist, neurokinin A. In isolated quinea pig tissues, SCH 206272 inhibited substance P-induced enhancement of elec. field stimulated contractions of the vas deferens, (pKb=7.6.+-.0.2), NKA-induced contraction of the bronchus (pKb=7.7.+-.0.2), and senktide-induced contraction of the ileum. In vivo, oral SCH 206272 (0.1-10 mg/kg, p.o.) inhibited substance P-induced airway microvascular leakage and neurokinin A-induced bronchospasm in the guinea pig. In a canine in vivo model, SCH 206272 (0.1-3 mg/kg, p.o.) inhibited NK1 and NK2 activities induced by exogenous substance P and neurokinin A. Furthermore, in quinea pig models involving endogenously released tachykinins, SCH 206272 inhibited hyperventilation-induced bronchospasm, capsaicin-induced cough, and airway microvascular leakage induced by nebulized hypertonic saline. These data demonstrate that SCH 206272 is a potent, orally active tachykinin NK1, NK2, and NK3 receptor antagonist. This compd. may have beneficial effects in diseases thought to be mediated by tachykinins, such as cough, asthma, and chronic obstructive pulmonary disease.

ACCESSION NUMBER: 2002:668660 CAPLUS

DOCUMENT NUMBER: 138:265440

TITLE: SCH 206272: a potent, orally active tachykinin NK1,

NK2, and NK3 receptor antagonist

AUTHOR(S): Anthes, John C.; Chapman, Richard W.; Richard, Christian; Eckel, Stephen; Corboz, Michel; Hey, John

A.; Fernandez, Xiomara; Greenfeder, Scott; McLeod, Robbie; Sehring, Susan; Rizzo, Charles; Crawley, Yvette; Shih, Neng-Yang; Piwinski, John; Reichard, Greg; Ting, Pauline; Carruthers, Nick; Cuss, Francis

-0.80

0.00

-5.60

-5.60

M.; Billah, Motasim; Kreutner, William; Egan, Robert

CORPORATE SOURCE: Department of Allergy, Schering-Plough Research Institute, Kenilworth, NJ, 07033, USA

SOURCE: European Journal of Pharmacology (2002), 450(2),

191-202 CODEN: EJPHAZ: ISSN: 0014-2999

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE:

English
44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE

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L9 2399 (NK1 (5A) (RECEPTÓR(3A) ANTAGONIST))

>> S L9 (P) (anticholinergic or bronchodilat? or (M3 (3A) muscarinic(2A)antagonist))

17 L9 (P) (ANTICHOLINERGIC OR BRONCHODILAT? OR (M3 (3A) MUSCARINIC
(2A) ANTAGONIST))

>> S L10 and Scopine
L11 0 L10 AND SCOPINE

>> dup rem L10
PROCESSING COMPLETED FOR L10
L12 17 DUP REM L10 (0 DUPLICATES REMOVED)

>> S L12 NOT Pd>20020708
L13 5 L12 NOT PD>20020708
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=> d L13 1-5 TI AB IBIB

L13 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

=> s (NK1 (5A) (receptor(3A)antagonist))

TI Pharmacology of MEN 11467: a potent new selective and orally-effective peptidomimetic tachykinin NK1 receptor antagonist

AB We have investigated the pharmacol. properties of MEN 11467, a novel partially retro-inverse peptidomimetic antagonist of tachykinin NK1 receptors. MEN 11467 potently inhibits the binding of [3H] substance P (SP) to tachykinin NK1 receptors in the IM9 lymphoblastoid cell line (pKi = 9.4.+-.0.1). MEN 11467 is highly specific for the human tachykinin NK1 receptors, since it has negligible effects (pKi <6) on the binding of specific ligands to tachykinin NK2 or NK3 receptors and to a panel of 30 receptors ion channels unrelated to tachykinin receptors. The antagonism exerted by MEN 11467 at tachykinin NK1 receptors is insurmountable in satn. binding expts., both KD and Bmax of SP were significantly reduced by MEN 11467 (0.3-10 nM). In the guinea-pig isolated ileum, MEN 11467 (0.03-1 nM) produced a nonparallel rightward shift of the concn.-response curve to SP methylester with a concomitant redn. of the Emax to the agonist (pKB = 10.7.+-.0.1). Moreover the antagonist activity of MEN 11467 was hardly reversible despite prolonged washout. In vivo, MEN 11467 produced a long lasting (> 2-3 h) dose-dependent antagonism of bronchoconstriction induced by the selective tachykinin NK1 receptor agonist, [Sar9, Met(O2)11]SP in anesthetized guinea-pigs (ID50s' = 29.+-.5, 31.+-.12 and 670.+-.270 .mu.g/kg, after i.v., intranasal and intraduodenal administration, resp.), without affecting bronchoconstriction induced by methacholine. After oral administration MEN 11467 produced a dose-dependent inhibition of plasma protein extravasation induced in quinea-pig bronchi by [Sar9, Met(O2)11] (ID50 = 6.7.+-.2 mg/kg) or by antigen challenge in sensitized animals (ID50 = 1.3 mg/kg). After i.v. administration MEN 11467 weakly inhibited the GR 73632-induced foot tapping behavior in gerbil (ED50 = 2.96.+-.2 mg/kg), indicating a poor ability to block central tachykinin NK1 receptors. These results demonstrate that MEN 11467 is a potent, highly selective and orally effective insurmountable pseudopeptide antagonist of peripheral tachykinin NK1 receptors with a long duration of action. 2002:484021 CAPLUS

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ACCESSION NUMBER: 2002:484021 CAPLUS
DOCUMENT NUMBER: 137:379900
TITLE: Pharmacology of MEN 11467: a potent new selective and orally-effective peptidomimetic tachykinin NK1 receptor antagonist
AUTHOR(S): Cirillo, R.; Astolfi, M.; Conte, B.; Lopez, G.;
```

JHOR(S): CIRILIO, R.; ASCOIT, M.; Conte, B.; Lopez, G.;
Parlani, M.; Sacco, G.; Terracciano, R.; Fincham, C.
I.; Sisto, A.; Evangelista, S.; Maggi, C. A.; Manzini,

CORPORATE SOURCE: Department of Pharmacology, Menarini Ricerche SpA, Pomezia-Roma, I-00040, Italy

SOURCE: Neuropeptides (Edinburgh, United Kingdom) (2001),

35(3&4), 137-147 CODEN: NRPPDD: ISSN: 0143-4179

Elsevier Science Ltd.

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ΤI In vitro and in vivo pharmacology of S 16474, a novel dual tachykinin NK1 and NK2 receptor antagonist

Since tachykinins released from lung sensory nerve endings are thought to play a role in inflammatory diseases of airways via NK1 and NK2 receptors, dual tachykinin NK1 and NK2 receptor antagonists may have a great therapeutic potential. In vitro, the cyclopeptide S 16474 (cyclo-[Abo-Asp(D-Trp(SucONa)-Phe-N-(Me)Bzl)]) bound to both human tachykinin NK1 and NK2 receptors expressed in two lines of transfected Chinese hamster ovary cells (IC50 values 85 nM and 129 nM, resp.), while showing a poor affinity for the rat tachykinin NK1 receptor. \$ 16474 inhibited the contractions induced by substance P in isolated rabbit vena cava (pA2 7.0) and by neurokinin A in rabbit pulmonary artery (pA2 5.6). In vivo in anesthetized guinea-pigs, S 16474 was found to dose dependently inhibit the bronchoconstrictions induced by i.v. administered substance P, neurokinin A and capsaicin. Plasma extravasation evoked in bronchi by endogenously released tachykinins under vagus nerve stimulation was abolished by S 16474 (10 .mu.mol/kg i.v.). These results demonstrate clearly that S 16474 is a tachykinin receptor antagonist exhibiting, in

vitro and in vivo, a dual inhibitory effect on NK1 and NK2 receptors.

ACCESSION NUMBER: 1996:7149 CAPLUS 124:136392

DOCUMENT NUMBER: ORIGINAL REFERENCE NO.: 124:25139a,25142a

TITLE: In vitro and in vivo pharmacology of S 16474, a novel

dual tachykinin NK1 and NK2 receptor antagonist AUTHOR(S): Robineau, Pascale; Lonchampt, Michel; Kucharczyk, Nathalie; Krause, James E.; Regoli, Domenico;

Fauchere, Jean-Luc; Prost, Jean-Francois; Canet,

CORPORATE SOURCE: Division de Pneumologie, Institut de Recherches

Servier, 11 Rue des Moulineaux, Suresnes, F-92150, Fr. SOURCE:

European Journal of Pharmacology (1995), 294(2/3), 677-84

CODEN: EJPHAZ; ISSN: 0014-2999

Elsevier

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

L13 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

In vitro and in vivo biological activities of SR140333, a novel potent non-peptide tachykinin NK1 receptor antagonist

SR140333 (I) is a new non-peptide antagonist of tachykinin NK1 receptors. SR140333 potently, selectively and competitively inhibited substance P binding to NK1 receptors from various animal species, including humans. In vitro, it was a potent antagonist in functional assays for NK1 receptors such as [Sar9, Met(O2)11] substance P-induced endothelium-dependent relaxation of rabbit pulmonary artery and contraction of guinea-pig ileum. Up to 1 .mu.M, it had no effect in bioassays for NK2 ([.beta.Ala8]neurokinin A-induced contraction of

endothelium-deprived rabbit pulmonary artery) and NK3 ([MePhe7]neurokinin B-induced contraction of rat portal vein) receptors. The antagonism exerted by SR140333 toward NK1 receptors was apparently non-competitive, with pD2' values (antagonism potency evaluated by the neg. logarithm of the molar concn. of antagonist that produces a 50% redn. of the maximal response to the agonist) between 9.65 and 10.16 in the different assays. SR140333 also blocked in vitro [Sar9, Met (O2)11] substance P-induced release of acetylcholine from rat striatum. In vivo, SR140333 exerted highly potent antagonism toward [Sar9, Met(O2)11] substance P-induced hypotension in dogs (ED50 = 3 .mu.g/kg i.v.), bronchoconstriction in guinea-pig (ED50 = 42 .mu.g/kg i.v.) and plasma extravasation in rats (ED50 = 7 .mu.g/kg i.v.). Finally, it also blocked the activation of rat thalamic neurons after nociceptive stimulation (ED50 = 0.2 .mu.g/kg i.v.).

ACCESSION NUMBER: 1994:124815 CAPLUS DOCUMENT NUMBER: 120:124815

ORIGINAL REFERENCE NO.: 120:21801a,21804a

TITLE: In vitro and in vivo biological activities of

SR140333, a novel potent non-peptide tachykinin NK1

receptor antagonist

AUTHOR(S): Emonds-Alt, Xavier; Doutremepuich, Jean Daniel; Heaulme, Michel; Neliat, Gervais; Santucci, Vincent;

Steinberg, Regis; Vilain, Pol; Bichon, Daniel; Ducoux, Jean Philippe; et al.

CORPORATE SOURCE: Sanofi Rech., Montpellier, F-34184, Fr.

SOURCE: European Journal of Pharmacology (1993), 250(3), 403-13

CODEN: EJPHAZ; ISSN: 0014-2999

DOCUMENT TYPE: Journal LANGUAGE: English

L13 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

Effects of an NK1 receptor antagonist, FK888, on constriction and plasma TI

extravasation induced in guinea pig airway by neurokinins and capsaicin AB The effects of FK888, an NK1 receptor antagonist, on airway constriction and airway plasma extravasation induced by neurokinins and capsaicin were investigated in guinea pigs. FK888 inhibited substance P (10-8M)- and neurokinin A (10-9M)-induced contraction of isolated guinea pig trachea, with IC50 values of 3.2 .times. 10-8 and 4.2 .times. 10-6M, resp. FK888 given i.v. inhibited substance P (13.5 .mu.g kg-1)-induced airway constriction with an ED50 value of 0.40 mg kg-1 but did not inhibit neurokinin A (1.1 .mu.g kg-1) - and capsaicin (3.1 .mu.g kg-1) - induced airway constriction at a dose of 1 mg kg-1. On the other hand, FK888 given i.v. inhibited airway plasma extravasation induced by substance P (1.3 .mu.g kg-1), neurokinin A (11 .mu.g kg-1) and capsaicin (100 .mu.g kg-1) with equal potency and ED50 values of 0.011, 0.0063 and 0.019 mg kg-1, resp. When FK888 was given locally (into the airway directly) inhibitory activities were more potent than following i.v. administration. In this case FK888 inhibited substance P-, neurokinin A- and capsaicin-induced airway constriction with ED50 values of 3.2, 190 and 550 .mu.g kg-1, resp., suggesting that an about 100 times higher dose is required to inhibit neurokinin A- and capsaicin-induced airway constriction than substance P-induced constriction. FK888 given orally was also effective in substance P-, neurokinin A- and capsaicin-induced airway plasma extravasation with ED50 values of 4.2, 5.9 and 9.5 mg kg-1. These results demonstrate that FK888 is an effective in vivo NK1 receptor antagonist and the different inhibitory activity of FK888 on airway responses suggests that substance P-, neurokinin A- and capsaicin-induced airway plasma extravasation is solely mediated via NK1 receptors whereas in airway constriction only substance P-induced reaction is mediated via NK1 receptors.

ACCESSION NUMBER:

DOCUMENT NUMBER: 119:62785

ORIGINAL REFERENCE NO.: 119:11089a,11092a

TITLE: Effects of an NK1 receptor antagonist, FK888, on constriction and plasma extravasation induced in

guinea pig airway by neurokinins and capsaicin AUTHOR(S): Murai, Masako; Maeda, Yasue; Hagiwara, Daijiro; Miyake, Hiroshi; Ikari, Norihiro; Matsuo, Masaaki;

Fujii, Takashi

CORPORATE SOURCE: Dep. Pharmacol., Fujisawa Pharm. Co., Ltd., Osaka, 532, Japan

SOURCE: European Journal of Pharmacology (1993), 236(1), 7-13

CODEN: EJPHAZ; ISSN: 0014-2999

DOCUMENT TYPE: Journal LANGUAGE: English

L13 ANSWER 5 OF 5 MEDLINE on STN

TI Effect of an NK1 receptor antagonist (CP-99,994) on hypertonic

saline-induced bronchoconstriction and cough in male asthmatic subjects.

AB To investigate the role of NK1 receptors in the pathogenesis of

bronchoconstriction and cough in asthma, we performed a randomized, double-blind, crossover study on the effects of a selective non-peptide tachykinin NKI receptor antagonist

(CP-99,994) on baseline measures of lung function and on hypertonic saline-induced bronchoconstriction and couph in 14 male subjects with mild sathma. CP-99,994 (250 micrograms/2 hours) and placebo were administered intravenously in 2-h infusions during consecutive visits 5 to 7 d apart. Specific airway resistance (SRaw) was measured and spirometry was performed at baseline and at 35 and 60 min. Next, hypertonic saline challenge was performed by delivering 10 breaths of saline of increasing concentration (0.9 to 7% in 1% increments at 5-min intervals) via an ultrasonic nebulizer until SRaw increased from baseline by 200% or 20 units, whichever was greater. Throughout the challenge cough was counted from a taped record made from two microphones placed close to the subject's larynx. We found that CP-99,994 did not significantly affect SRaw or spirometric measures of lung function during the first hour of

infusion. Although CP-99,994 infusion markedly attenuated the bronchoconstrictor response to the saline challenge in two subjects, it did not significantly decrease the area under curves obtained for SRaw and cough during saline challenge for the group as a whole (p = 0.9 for SRaw;p = 0.8 for cough). We conclude that administration of 250 micrograms/kg of CP-99,994 over 2 h does not significantly inhibit hypertonic saline-induced bronchoconstriction or cough in subjects with mild asthma

and does not have acute bronchodilator activity in these subjects.

ACCESSION NUMBER: 1995392865 MEDLINE DOCUMENT NUMBER: PubMed ID: 7663799

TITLE: Effect of an NK1 receptor antagonist (CP-99,994) on

hypertonic saline-induced bronchoconstriction and cough in

male asthmatic subjects.

AUTHOR: Fahy J V; Wong H H; Geppetti P; Reis J M; Harris S C;

Maclean D B; Nadel J A; Boushey H A

CORPORATE SOURCE: Department of Medicine, University of California, San

Francisco 94143, USA.

SOURCE: American journal of respiratory and critical care medicine,

(1995 Sep) Vol. 152, No. 3, pp. 879-84. Journal code: 9421642. ISSN: 1073-449X.

PUB. COUNTRY: United States

DOCUMENT TYPE: (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE) (RANDOMIZED CONTROLLED TRIAL)

(RESEARCH SUPPORT, NON-U.S. GOV'T)

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LANGUAGE:
                    English
FILE SEGMENT:
                    Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH:
                    199510
                    Entered STN: 20 Oct 1995
ENTRY DATE:
                    Last Updated on STN: 20 Oct 1995
                    Entered Medline: 6 Oct. 1995
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1.3
              8 S L1 SSS FULL
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L4
              6 S L3
     FILE 'CAPLUS, MEDLINE, USPATFULL, BIOSIS' ENTERED AT 22:57:40 ON 09 NOV
     2008
L5
           2399 S (NK1 (5A) (RECEPTOR(3A)ANTAGONIST))
L6
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1.8
              1 S L7 NOT PD>20020708
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L9
           2399 S (NK1 (5A) (RECEPTOR (3A) ANTAGONIST))
L10
             17 S L9 (P) (ANTICHOLINERGIC OR BRONCHODILAT? OR (M3 (3A) MUSCARI
L11
              0 S L10 AND SCOPINE
L12
             17 DUP REM L10 (0 DUPLICATES REMOVED)
L13
              5 S L12 NOT PD>20020708
=> d que L6
L5
           2399 SEA (NK1 (5A) (RECEPTOR(3A) ANTAGONIST))
L6
              5 SEA L5 (P) (COPD OR (CHRONIC (W) OBSTRUCTIVE (W) PULMONARY(W)
                (DISEASE OR DISORDER)))
=> d que L10
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2399 SEA (NK1 (5A) (RECEPTOR(3A) ANTAGONIST))

MUSCARINIC(2A) ANTAGONIST))

17 SEA L9 (P) (ANTICHOLINERGIC OR BRONCHODILAT? OR (M3 (3A)

1.9

L10